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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,778	03/30/2001	Peter Bolduan	BOLDUAN-1	6408

7590 10/03/2003

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Roslyn, NY 11576-1696

EXAMINER

LEADER, WILLIAM T

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/823,778

Applicant(s)

BOLDUAN, PETER

Examiner

William T. Leader

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7 and 12 is/are rejected.
- 7) ☒ Claim(s) 4-6 and 8-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-12, drawn to a filter device with a conductor grounding a ceramic membrane filter element, classified in class 210, subclass 243.
  - II. Claims 13-16, drawn to a filter device with a device for generation of an electrical field, classified in class 204, subclass 660
  - III. Claim 17, drawn to a method for the microfiltration or ultrafiltration of a charged fluid, classified in class 204, subclass 554.
2. The inventions are distinct, each from the other because:
3. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an apparatus without a means for grounding the ceramic membrane filter element. See MPEP § 806.05(d).
4. Inventions II and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process can be performed using apparatus other than that of the Group II claims. While claim 13 recites a device

for generation of an electrical field provided in the ceramic membrane filter element, claim 17 may be performed with apparatus where an electrical field is generated outside of the ceramic membrane filter element.

5. Groups I and III are not related.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. During a telephone conversation with Frederick Dorchak on September 18, 2003, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Iwahori et al (4,326,960).

10. The admitted prior art is that found at pages 1-3 of the specification under the heading "The Prior Art". The admitted prior art shows that filter devices of the type recited in instant claim 1 are known. Instant claim 1 differs from the filter devices of the prior art by reciting at least one electrical conductor electrically connected with and effecting grounding of the ceramic membrane filter element.

11. The Iwahori et al patent is directed to a tubular permselective membrane module. The module includes a plurality of tubes 2 which support membrane 3 through which the liquid being processed flows under pressure. See figure 1 and the description thereof. Iwahori et al observe that static electricity may be produced due to friction between charged particles in the solution being treated and the inner wall of the tubes so that the apparatus becomes charged with static electricity. If the solution is flammable, there is a danger of explosion and/or fire. See column 1, lines 15-22. To overcome this hazard, Iwahori et al teach that a ground means for grounding the tubes may be provided (column 1, lines 55-57). The tubes are grounded by a grounding means comprising spacers 4, case 1 and stay bolt 7 (column 3, lines 48-49).

12. The prior art of record is indicative of the level of skill of one of ordinary skill in the art. It would have been obvious at the time the invention was made to have

provided an electrical conductor grounding a ceramic membrane filter element such as the filter of the admitted prior art to have reduced the danger of explosion or fire as taught by Iwahori et al. Iwahori et al show ground wire 8 connected to plug 80 on the surface of case 1, meeting the limitations of instant claim 2. Iwahori et al further suggest grounding the metallic walls 610 of passages 151 and 161 to the exterior of the module using wire 82 as shown in figure 4a, meeting the limitation of instant claim 3 which requires a component separate from the pressure housing. Figure 5 suggests a fitting at each end for connection to a conduit as recited in instant claim 7. Iwahori et al shows a grounding spacer 4 connected to each tube as recited in instant claim 12.

13. Claims 4-6 and 8-11 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 4 recites that the ceramic membrane filter has at least one through hole and that the conductor is inserted in the through hole, while claim 8 recites a plurality of through hole openings and one electrical conductor extending through one of the through openings. The prior art of record does not suggest these features.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William T. Leader whose telephone number is


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703-308-2530. The examiner can normally be reached on Mondays-Thursdays and alternate Fridays, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on 703-308-1146. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
William Leader  
September 17, 2003

  
ROY KING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700